AWS/ITP–93/001

WEATHER TUTOR I

STABILITY BASICS

An AWS Interactive Training Package

AUGUST 1993

Detachment 5
HQ AIR WEATHER SERVICE
Keesler Air Force Base, Mississippi 39534-2447

REVIEW AND APPROVAL STATEMENT

AWS/ITP-93/001, *Weather Tutor I--Stability Basics*, August 1993, has been reviewed and is approved for public release. There is no objection to unlimited distribution of this document to the public at large, or by the Defense Technical Information Center (DTIC) to the National Technical Information Service (NTIS).

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13. Abstract: The first in a series of computer-based interactive training packages produced by Air Weather Service for use by Air Force weather units. It consists of text (instructions for running and using the computer program) and three 3 1/2-inch diskettes containing program software that generates high-resolution graphic images, animation, and text. The training package is in three parts: the first familiarizes students with the relationships between atmospheric variables. The second correlates these variables to atmospheric stability using the parcel theory and the Equation of State. The third and final part demonstrates the relationships of stability and moisture content with corresponding cloud scenes. An entry knowledge test is required before starting the lesson.

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Standard Form 298

PREFACE

This product–*Weather Tutor I, Stability Basics*–is the first in a planned series of computer-based, interactive training packages developed by Detachment 5, HQ Air Weather Service, at Keesler AFB, MS. Detachment 5 is made up of 12 people with skills that include weather forecasting, computer applications, and graphics production.

This package, and those that follow, are designed to meet the follow-on training requirements of the Air Force weather career field. Although this first package uses only computer diskette technology as its medium, future productions will feature combinations of computer graphics and text from CD-ROM drives, along with full-motion video and sound from interactive videodisks.

Weather Tutor I, Stability Basics, should meet the training needs of weather observers preparing for forecaster school or for forecaster school graduates who need refresher training in the basic principles of atmospheric stability. The tutorial has three objectives, each building on the one that preceded it. The first objective presents the relationships between atmospheric variables. The second correlates those atmospheric variables to atmospheric stability in accordance with the Equation of State and the "parcel theory." The final objective relates stability and moisture content to actual cloud scenes.

Because of the complexity of the material presented, students are required to take an entry knowledge test. If they pass, they are given a series of by-pass questions that determine their entry point into the lesson. If they fail, they are provided references for review before retaking the entry test.

Weather Tutor I is designed for use on the Air Weather Service Follow-On Training Multimedia Training System.

Detachment 5 is very interested in user comments on this package, as well as your thoughts and suggestions for future efforts. Call, write, or fax:

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I. INSTALLATION

A. Installing Weather Tutor I

All references to the menu system refer to Menu System Plus provided on the FOT Multimedia Training System (MTS) supplied by AWS.

To install **Weather Tutor I**, you will need to do the following steps:

Put Disk 1 in the A drive.

a. At the C:\MENU40> prompt on the computer, type *A:* then press **ENTER** .

b. You should now see A:>

c. Type ***INSTALL*** and press **ENTER**.

d. You will be prompted to insert each disk during the install process. Note: Disks 2 and 3 will take approximately 5 minutes each to load.

e. You will be prompted during the install process should the AUTOEXEC.BAT file need to be updated. Verify that the answer to the prompt is '***Y***', if so then press the **Enter** key.

f. Once the install is complete, remove the disk from the 'A' drive and reboot your system before proceeding further. To reboot the system, press the **Ctrl Alt Del** keys at the same time.

B. AWS Menu System Loading Instructions

1. Adding Weather Tutor I to the menu

From the main MENU, using arrow keys highlight first "Available" box

Press **F3** (Menu Options)

Press **F2** (Modify Menu)

Type *A* (Add)

Press **ENTER**

Type *Y* (Sub menu)

Type newname ***FOT - DET 5 HQ AWS***

Press **ENTER**

You will now be at the **FOT - DET 5 HQ AWS** sub menu.

For this first course you will need to add two menu options to the **FOT - DET 5 HQ AWS** sub menu; *Course Administration* and *Weather Tutor I*. Course Administration will be used to add students, assign courses, and to manage future courses offered by Detachment 5.

2. Adding Course Administration to the DET 5 HQ AWS sub menu

Using the arrow keys, highlight an "Available" box.

Type *A* (Add)

Press **ENTER**

Type *Y* (Sub menu)

At Enter new Selection NAME: Type ***COURSE ADMINISTRATION***

Press **ENTER**

You will now be at the **COURSE ADMINISTRATION** sub menu.

3. Adding Weather Tutor I to the Course Administration sub menu

Using the arrow keys, highlight an "Available" box.

Type *A* (Add)

Press **ENTER**

Type *N* (Sub menu)

Type *Y* (Change selection)

At Enter new Selection NAME: Type ***WEATHER TUTOR I*** and press **ENTER**

At Enter new Selection DRIVE: Type *C* and press **ENTER**

At Enter new Selection PATH: Type ***SKEWT*** and press **ENTER**

At Enter new Selection COMMAND: Type ***CMI*** and press **ENTER**

Type *Y*

Press **ESC** twice to return to the **FOT - DET 5 HQ AWS** sub menu

4. Adding Weather Tutor I to the DET 5 HQ AWS sub menu

Using the arrow keys, highlight an "Available" box.

Press **F3** (Menu Options)

Press **F2** (Modify Menu)

Type ***A*** (Add)

Press **ENTER**

Type ***N*** (Sub menu)

Type ***Y*** (Change selection)

At Enter new Selection NAME: Type ***WEATHER TUTOR I*** and press **ENTER**

At Enter new Selection DRIVE: Type ***C*** and press **ENTER**

At Enter new Selection PATH: Type ***SKEWT*** and press **ENTER**

At Enter new Selection COMMAND: Type ***WTI*** and press **ENTER**

Type ***Y***

Press **ESC** two times to return to main MENU

II. COURSE MANAGEMENT

A student's progress may be monitored by the supervisor or OJT manager. Course management should be used to monitor student performance to identify any areas causing repeat problems for the student and which may require one-on-one assistance from a trainer. This is accomplished by generating reports using the Computer Managed Instruction (CMI) function, discussed later in this users manual. To better understand the information provided by the CMI reports it is important to understand the structure of the course.

A. Course Structure

Some basic entry level knowledge is required to be able to understand principles presented in this tutorial. Entry level knowledge is tested in the Entry Knowledge Test (EKT). The EKT is the first test the student must take. If a student fails the EKT they will be provided specific references to review before trying the EKT again. A student that continues to have problems with the EKT may need supervisor assistance before starting the tutorial. The EKT must be passed to start the tutorial. If the student passes the EKT on a second or later try they will start the tutor at objective 1.

Weather Tutor I is divided into 3 main objectives and a few sub-objectives. If a student passes the EKT on the first try they are given a series of By Pass Tests (BPT), BPT01 - By Pass Test 1 for objective 1. BPT02 - By Pass Test 2 for objective 2, ETC.... These tests determine if the student has sufficient knowledge to skip early objectives and move on to more complex material. Once the student passes as many BPTs as possible they may start the tutorial at any point up to an including the last BPT they passed.

Objective tests are administered as the student progresses through the tutorial, OBJ1T for objective 1 test, OBJ2AT for objective 2a test, ETC..... If a student does not pass an objective test they are given additional references to review before reviewing the objective material. Successful completion of objective 3b requires the knowledge taught in all 3 main objectives and signifies course completion.

B. Computer Managed Instruction

1. Registration

You have now completed loading Weather Tutor I. Weather Tutor I is setup to allow the students to self-register themselves or to have the Training/System Manager register them. Registration is required only once.

a. Students Self-Registration. To self-register, the student selects Weather Tutor I from the DET 5 HQ AWS sub-menu. The system will ask them if they have registered; if answered 'Y', the student will be provided the WEATHER TUTOR I logon screen. If the student answers 'N', the system will then prompt for a Name, Logon Name, and a Password. It is suggested that the student use the same logon name they used for the COMET learning modules or the student's last name. Once registered, the student will be provided the WEATHER TUTOR I logon screen.

b. Training/System Manager Student Registration. For Training/System Managers to register students, this function and more are accomplished using Computer Managed Instruction (CMI) functions. With CMI functions, you can control user access to courses, collect data, and generate reports to evaluate student performance or to evaluate lessons. Instructions to reach the CMI menu and a description of CMI options are explained below.

1. From the **FOT - DET 5 HQ AWS** menu select ***Course Administration*** and press **ENTER**.

2. Using the arrow keys, highlight *Weather Tutor I* and press ENTER.

3. Next you will be prompted for a logon name, type ***Sysadmin*** for name, press **ENTER** twice.

4. You will be at the *MAIN MENU*, select ***CMI functions*** and press **Enter**.

4. You will now be at the *CMI MENU*.

5. From the *CMI MENU* you have five selections. We will briefly explain the selections associated with registration and give short step by step instructions for some of the more important features.

a. Registering Students: Through the registration option, you control who in your unit can take courses sent to you by Detachment 5. Here's how to register someone to take a course. Remember your people must be registered in order to take a course.

(1). Select ***Registration*** from the *CMI MENU* and press the **Enter** key.

(2). To add a new student press **A**.

(3). A window frame will appear requesting information that needs to be filled in to add a student;

Name:
Logon name:
Password:
User Type: Unstructured
User ID:
Rank/Job:
Class: None

(4). You only need to fill in or change the following fields;

Name:
Logon name:
Password:

(5). We suggest you use the same logon name used for the COMET learning modules or the student's last name for the first two fields.

(6). Password is case sensitive and students must type the password exactly the same. If students forget their password you can change the password following these same instructions.

(7). Once you have entered the necessary information, press the **F8** key. The students you have registered will be displayed. If you need to add more students, press **A** again. Press **ESC** to return to the *CMI MENU*.

b. Information about the User Type field:

Structured students can access only courses assigned to them by System Managers. Assigned courses are presented to them in a specified order.

Unstructured students can access only courses assigned to them, but they can select assigned courses in any order.

Free students are given a list of all the available courses in the course catalog. They can take any course in any order they wish.

2. Assignments

a. Assigning Students to Courses: With the *Assignments* option you make specific course assignments for your unit members. Structured and unstructured students can only access courses that have been assigned to them. Weather Tutor I is the first and only course offered at this time. The Assignment option will become more meaningful when more courses are added and you want to control a students curriculum based on their experience or knowledge.

1. Select ***Assignments*** to assign the course to one or more students.

2. Once you have the window frame up with students name, press **M** to mark each student you wish to assign a course.

3. Now, press the **right arrow** key to highlight the course and press **M** to mark it. Now press the **A** key to *Add* the course assignment for the students. You will receive a message stating "Course assignment(s) added". You have now assigned the marked students to the marked course.

4. Press the **ESC** key twice. This will bring you back to the *CMI MENU*. Press **ESC** once more to return to the *MAIN MENU* and then select **X** for *Exit*.

3. Catalog Courses

The catalog function is used to maintain a catalog of available courses and to help you build a course structure. This function will be accomplished for you when courses are sent to you. Because of this there will be no response when CATALOG COURSES option is selected.

4. Generate Reports

Generate Reports option in CMI can help you monitor student performance and evaluate the effectiveness of courses. Reports can be displayed on the screen, written to ASCII text files, or printed, if you have connected a printer to your student workstation. The following are standard reports provided by the authoring system used to create Weather Tutor I. Some fields don't apply to Weather Tutor I and are indicated by the asterisk. To generate reports, follow the instructions below from the CMI MENU.

a. Select ***Generate Reports.***

b. A list of courses will appear (unless you have only one course)

c. If a list appears, highlight the course you want to generate reports for and press **ENTER**.

d. After you select a course, the REPORT MENU appears.

e. From the REPORT MENU you have three types of reports available, unit reports, numeric reports, and answer reports.

(1). Unit Reports: Each test in Weather Tutor I is labeled as a unit. From unit reports Training Managers can see how many times someone has taken a test, what they scored each time a test was taken, and how long they spent taking the test. This information can be obtained for a single student or a group students, likewise you can select a single test or all the tests. To specify more than one student or more than one unit, type an asterisk * when prompted for a students name or unit name respectively. Weather Tutor I is divided into nine test units (listed below);

EKT	(Entry Knowledge Test)
BPT	(By-Pass Test)
OBJ1T	(Objective 1 Test)
OBJ2AT	(Objective 2A Test)
OBJ2BT	(Objective 2B Test)
OBJ2CT	(Objective 2C Test)
OBJ2TT	(Objective 2 Transition Test)
OBJ3AT	(Objective 3A Test)
OBJ3BT	(Objective 3B Test)

Below is an example of a unit report for users ***STEWART*** and ***HAGAN***. In the example, the column labelled *Unit* shows Stewart with four entries for EKT this means he took the Entry Knowledge Test four times before passing. Hagan, on the other hand, passed the Entry Knowledge Test the first time and also passed the By-Pass Test for Objective 1. Hagan also has completed tests for 2A, 2B, 2C, 2T, and 3A, but is on test 3B for the third time.

Student STEWART

Unit	Time	Correct	Incorrect	%	*Score	Possible	*%	Taken
EKT	00 01 27	4	4	50	0	8	0	1
EKT	00 01 20	7	1	87	0	8	0	1
EKT	00 01 14	6	2	75	0	8	0	1
EKT	00 02 30	10	0	100	0	10	0	1
BPT	00 00 14	1	0	100	0	1	0	1

Student HAGAN

Unit	Time	Correct	Incorrect	%	*Score	Possible	*%	Taken
EKT	00 01 34	10	0	100	0	10	0	1
BPT	00 02 39	2	3	40	0	5	0	1
OBJ2AT	00 02 13	5	0	100	0	5	0	1
OBJ2BT	00 01 46	4	0	100	0	4	0	1
OBJ2CT	00 06 54	4	0	100	0	4	0	1
OBJ2TT	00 04 02	4	0	100	0	4	0	1
OBJ3AT	00 03 43	4	0	100	0	4	0	1
OBJ3BT	00 03 02	0	0	0	0	0	0	1
OBJ3BT	00 04 19	0	0	0	0	0	0	1

Column Headings:

Unit	-	Test Name
Time	-	Time spent in test (hours:minutes:seconds)
Correct	-	Number of correct responses
Incorrect	-	Number of incorrect responses
%	-	Percentage correct
Score	-	Score is not used in Weather Tutor I.
Possible	-	Total number of questions
%	-	Percentage fields are used for weighted questions and are not currently used in Weather Tutor I.
Taken	-	Number of times a test is taken. In Weather Tutor I to keep each score separate we add a new entry each time a student takes a test.

(2). Numeric Reports: Numeric reports are not useful in Weather Tutor I but may be used in future Detachment 5 courses.

(3). Answer Reports: Answer reports provide detailed information on a student's test. Like unit reports you can specify individual students or groups of students or one unit or all units.

Below is an example of an answer report for user ***HAGAN***. In the example Hagan answered "C" to EKT-Q01 or Entry Knowledge Test - Question 1 and he answered "B" to BPTO1-Q01 or By Pass Test 1 - Question 1.

Student HAGAN

Unit	*Frame	Answer	Time	*Correct	*Score
EKT	EKT-Q01	C	0 00 11	U	0
EKT	EKT-Q02	A	0 00 16	U	0
EKT	EKT-Q03	B	0 00 06	U	0
EKT	EKT-Q04	B	0 00 06	U	0
EKT	EKT-Q05	C	0 00 05	U	0
EKT	EKT-Q06	D	0 00 05	U	0
EKT	EKT-Q07	B	0 00 05	U	0
EKT	EKT-Q08	C	0 00 05	U	0
BPT	BPTO1-Q01	B	0 00 06	U	0
BPT	BPTO2-Q01	C	0 00 06	U	0
BPT	BPTO2-Q02	A	0 00 05	U	0
BPT	BPTO2-Q03	D	0 00 11	U	0
BPT	BPTO2-Q04	B	0 00 06	U	0
BPT	BPTO3-Q01	C	0 00 07	U	0
BPT	BPTO3-Q02	D	0 00 07	U	0
BPT	BPTO3-Q03	D	0 00 21	U	0

Column Headings:

Unit - Test Name

Frame - Frame

Frame names are the actual screen names used in building the Weather Tutor course, as you can see we have attempted to name the frames with a meaningful names, i.e. frame **EKT-Q01**, is **Entry Knowledge Test - Question 1**.

Answer - Answer is the actual letter the student selected from the test.

Time - Time spent in test (hours:minutes:seconds)

Correct - Correct is not used in an answer report for Weather Tutor I.

Score - Score is not used in Weather Tutor I

All of the student data is kept in a sub-directory called C:\SKEWT\PERF do not delete this directory or the files in it. Detachment 5 will gather this data at a later date and use this information to identify problems in course design and improve on future courses we create.

5. Student Data Transfer

This function is available, but is not used at this time.

DISTRIBUTION

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46 WS/CC, 601 W Choctawatchee Ave, Ste 60, Eglin AFB FL 32542-5719 . . . 1
377 ABW/CC, 3400 Clark Ave SE, Kirtland AFB NM 87117-5776 . . . 1
412 OSS/CC, 85 S Flightline Rd, Edwards AFB CA 93524-6460 . . . 1
645 WS/DO, 5291 Skeel Ave, Ste 1, Wright-Patterson AFB, OH 45433-5231 . . . 1
649 SPTG/DOW, Hangar 1 C St, Hill AFB, UT 84056-5232 . . . 1
651 SPTG/DOW, 303 Luke Dr, Ste 1, Kelly AFB, TX 78241-5638 . . . 1
652 SPTG/DOW, 3028 Peacekeeper, Ste 4, McClellan AFB, CA 95652-1020 . . . 1
653 SPTG/DOW, 250 Eagle St, Ste 202, Robins AFB GA 31098-2602 . . . 1
654 SPTG/DOW, 3800 A Ave, Tinker AFB, OK 73145-9108 . . . 1

AETC/XOSW, 1F St Ste 2, Randolph AFB, TX 78150-4325 . . . 1
12 OSS/DOW, H-08, 1350 5th Street East, Randolph AFB, TX 78150-4410 . . . 1
14 OSS/DOW, 595 1st St, Ste #3, Columbus AFB, MS 39701-4201 . . . 1
64 OSS/DOW, 145 N Davis Dr., Bldg 79, Reese AFB, TX 79489-5000 . . . 1
80 FTW/DOOW, J Ave., Bldg 1360, Step 235, Sheppard AFB, TX 76311-5000 . . . 1
71 OSS/DOW, 623 Elam Rd., Suite 110, Vance AFB, OK 73705-5412 . . . 1
47 OSS/DOW, 541 1st St., Suite 2, Laughlin AFB, TX 78843-5210 . . . 1
81 SG/OSFWX, 817 H St, Ste 102, Keesler AFB, MS 39534-2452 . . . 1
334 TTS/TTMV, Bdlg 4342, 700 H St, Keesler AFB, MS 39534-2499 . . . 2
502 OSS/OSW, Bldg 84, Rm 117, Maxwell AFB, AL 36112-5000 . . . 1
510 OSS/WE, Bldg 1200, Rm 6, Wolfe Ave, Edwards AFB, CA 93523-5000 . . . 1

5 WS (PACAF), Unit 15173, APO AP 96205-0108 . . . 1
Det 1, 5 WS, Unit 15678, APO AP 96205-0678 . . . 1

OL-A, Det 1, 5 WS, Unit 15630, APO AP 96208-0195 . . . 1
Det 2, 5 WS, Unit 15200, APO AP 96271-0136 . . . 1
OL-A, Det 3, 5 WS, Unit 15675, APO AP 96257-0675 . . . 1
OL-B, Det 3, 5 WS, Unit 15118, APO AP 96224-04201 . . . 1
8 OSS/WS, Unit 2139, APO AP 96264-2139 . . . 1
603 ACCS/WE, Unit 2051, APO AP 96278-2072 . . . 1

PACAF/DOW, Bldg 1102, 25 E St, Ste 1232, Hickam AFB, HI 96853-5426 . . . 1
15 WS, 800 Hangar Ave, Hickam AFB HI 96853-5244 . . . 1
Det 1, 15WS, 1102 Wright Ave, Wheeler AAF HI 96854-5200 . . . 1
18 OSS/OSW, Unit 5177, Box 10, APO AP 96368-5177 . . . 1
374 OSS/DOW, UNIT 5222, APO AP 96328-5222 . . . 1
623 SPTS/DOW, Unit 12503, APO AP 96510-2503 . . . 1
643 SPTS/OF, Unit 12526, APO AP 96513-2526 . . . 1
673 OPS/WE, Unit 12509, APO AP 96512-2250 . . . 1

11 OPG/WE, 6900 9th Ste 205, Elmendorf AFB, AK 99506-5000 . . . 1
3 OSS/WE, 7th St., Bldg 32235, Elmendorf AFB, AK 99506-5000 . . . 1
343 WS, 1215 Flightline Ave, Ste 2, Eielson AFB, AK 99702-1520 . . . 1
Det 1, 343 WS, Ft Wainwright, AK 99703-5200 . . . 1
633 OSS/OSW, Unit 14035, APO AP 96543-4035 . . . 1
Det 1, 633 OSS, COMNAVMAR, PSC 489, Box 20, FPO AP 96536-0051 . . . 1

USAFE/DOW, Unit 3050, Box 15, APO AE 09094-5015 . . . 1
86 OPS GP, Unit 8495, APO AE 09094-5015 . . . 1
Det 1, 86WS (USAFE), Unit # 7890, APO AE 09126-7890 . . . 1
39 OSS/OSW, Unit 7090, Box 115, APO AE 09824-5000 . . . 1
48 OSS/DOM, Unit 5245, Box 390, APO AE 09464-5390 . . . 1
52 OSS/WEF, Unit 8870, Box 270, APO AE 09126-0270 . . . 1
65 ALSS/WEF, APO AE 09720-7795 . . . 1
100 OSS/DOW, Unit 4965, APO AE 09459-5000 . . . 1
401 OSS/OGSW, Unit 6160, APO AE 09601-5000 . . . 1
435 OSS/DOW, Unit 7435, APO AE 09097-5000 . . . 1

7WS, Unit 29351, APO AE 09014-5000 . . . 1
OL-A, 7 WS, C/O 527 MI OPS, APO AE 09157-5000 . . . 1
OL-C, 7WS, CMR 445, Box 260, APO AE 09046-5000 . . . 1
OL-F, 7WS, Unit 31401, Box 6, APO AE 09630-5000 . . . 1
OL-J, 7WS, CMR 431, APO AE 09175-5000 . . . 1
Det 1, 7WS, HQ USEUCOM ECJ3-OD-WE, Unit 30400 Box 1000, APO AE 09128-5000 . . . 1
Det 2, 7WS, Unit 20200, APO AE 09165-9816 . . . 1
Det 3, 7WS, Unit 29231, APO AE 09102-3737 . . . 1
OL-A, Det 3, 7 WS, Unit 29719 Box 363, APO AE 09028-5000 . . . 1
Det 7, 7WS, Unit 28130, APO AE 09114-5000 . . . 1
Det 10, 7WS, Unit 26410, APO AE 09182-0006 . . . 1
OL-A, Det 10, 7WS, CMR 54, Unit 31020, APO AE 09250- 5000 . . . 1
Det 13, 7WS, Cmr 416, Box S, APO AE 09140-9998 . . . 1
Det 26, 7WS, Unit 29632, APO AE 09096-5000 . . . 1

107 Weather Flight, Selfridge ANGB, MI 48045-5024 . . . 1
120 Weather Flight, Buckley ANGB, CO 80011-9599 . . . 1

NAVOCEANO (CWO4 Shoemaker), Code N2513, 1002 Balch Blvd, Stennis Space Ctr, MS 39522-5001 . . . 1

CDR USASOC, Attn: AOIN-ST, Ft Bragg, NC 28307-5200 1
JSOC/Weather, P.O. Box 70239, Ft Bragg, NC 28307-5000 1
USAIC/SWO, Attn: ATSI-CDW, Ft Huachuca, AZ 85613-6000 1

NWS W/OM21(Attn: Leroy Spayd), 1325 East-West Highway, Rm 13208, Silver Spring MD 20910 1
COMET, 2555 55th St, Boulder CO 80307 1
Cape Canaveral Forecast Facility, ROCC Bldg, 81900 Cape Canaveral AFS FL 32925-6357 . . . 1
94 SG/WE (Barton) Bldg 737, Dobbins AFB GA 30069-5000 1
28 OSS/OSAW (STC), Bldg 7918, Ellsworth AFB SD 57706-5000 1
USAFA Dept of Economics & Geography, Colorado Spings, CO 80840-5701 1
USAFA/CWOSW, Air Field Dr., Bldg 9206, USAF Academy, CO 80840-5000 1
Det 3/DOXW, 1900 West Flamingo, Ste 266, P.O. Box 19070, Las Vegas NV 89119-5116 1
193 SOG/DOW, Bldg 19-101, Rm 108 AASF #1, Indiantown Gap, Annaville PA 17003-5005 1
Westover BWS, Bldg 7091, R, 123, Westover AFB MA 01022-5000 1
Weather Readiness Trng Ctr (WRTC), P.O. Box 465, Camp Blanding , Starke FL 32091-9703 . . 1
Bureau of Meteorology Tng Ctr, Attn: Ian Bell, GPO Box 1289K, Melbourne Australia 3001 1
DTIC-FDAC, Cameron Station, Alexandria, VA 22304-6145 2
AUL/LSE, Maxwell AFB AL 1
AWSTL, Scott AFB, IL 62225-5438 35